scopy successful, I am not sure. In all patients mucus has been sucked from the bronchial tree, but in only one patient have I obtained a thick, stringy mucus plug from one bronchus. If cohesion of surfaces tends to promote atelectasis, perhaps instrumentation helps to relieve this condition.

Following bronchoscopic aspiration, there is usually a progressive improvement in the infant's respiration. However, complete relief most frequently occurs six to eight hours after instrumentation. This is apparently due to removal of secretions from the larger bronchi allowing the smaller terminal branches to drain.

Newborn atelectasis most commonly occurs in premature patients. In our series, nineteen of the twenty-three patients bronchoscoped were in this category, representing eighty-two and six-tenths per cent (82.6 per cent). The smallest infant treated was a four pound, four ounce (4 lb., 4 oz.) twin. Another weighing four pounds, seven ounces (4 lb., 7 oz.) and seven weeks premature, was likewise bronchoscoped and in both instances the infants went on to normal development.

The procedure of bronchoscopy seems to produce little, if any shock to these babies. Likewise, laryngeal edema does not develop secondary to instrumentation. This is due to two factors: first, the length of time consumed in the procedure is less than four minutes, and second, the type of bronchoscope used produces little trauma to the glottic chink

The bronchoscope used is the new improved three millimeter bronchoscope devised by Dr. Simon Jesberg.[6] While offering the same inside diameter, it is about one millimeter smaller in its outside diameter than the old Jackson instrument. Consequently this instrument passes through the smallest glottic chink without difficulty, and subsequent laryngeal edema is prevented.

SUMMARY

1. The etiology of the newborn atelectasis is not fully understood.

2. Selected cases of newborn atelectasis secondary to bronchial obstruction, which fail to respond to conservative treatment, are materially benefited by bronchoscopic aspiration.

3. Most cases of atelectasis occur in premature infants.

4. Bronchoscopic aspiration of the newborn is a relatively benign procedure when properly performed.

5. The improved three millimeter Jesberg bronchoscope is the instrument of choice in cases of newborn atelectasis.

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Girolamo Fracastoro (1484-1553).—Fracastorius, as he was generally known, made his bid for fame in such varied fields as geology, astronomy, and poetry. In medicine, he is chiefly remembered by a kind of medical poem on syphilis, "Syphilidis sive de Morbo Gallico," from which the disease obtained its present name. In his book, "De contagione," Fracastorius gave expression to his idea of the germ theory in infection (seminaria contagionum), which bears a superficial resemblance to modern doctrine.—Warner's *Calendar of Medical History.*

CLINICAL NOTES AND CASE REPORTS

STAPHYLOCOCCUS AUREUS ENDOCARDITIS*

TREATMENT WITH PENICILLIN—REPORT OF CASE

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SINCE the successful employment of penicillin in the treatment of bacterial endocarditis caused by *Streptococcus viridans,* numerous reports have appeared in which the drug has been used in *Staphylococcus aureus* endocarditis, with uniformly negative results. In the case to be presented, the diagnosis of stapylococcus endocarditis is supported by the prolonged bacteremia, the character of the murmurs, and the appearance of the emboliform lesions during the course of the infection.

REPORT OF CASE

Upon admission the patient, a 23-year-old white male, gave a history of an illness, several years previous, which had been diagnosed as arthritis with fever. Palpitations were stated to occur upon exertion. The immediate complaint was pain under the left scapula and moderate fever of one day's duration. Examination revealed a soft diastolic murmur over the aortic area, a loud P_2 sound, and acute pharyngitis. X-ray examination showed a moderately enlarged left ventricle. The temperature declined from a high of 100.8° F. on admission to 98° F. on the fifth day after admission. During this period the patient received sulfadiazine and sulfamerazine. On the fifth day after admission the temperature rose abruptly to 104° F. A blood culture taken at this time showed the presence of a coagulase-positive *Staphylococcus aureus.* A diagnosis of staphylococcus endocarditis was made, and sulfadiazine and sulfamerazine were given alternately, from 1 to 2 grams every four hours, from the sixth to the eighth day. On the ninth day after admission intramuscular penicillin therapy was begun, 10,000 Oxford Units being administered every 2 hours. Treatment was continued for 14 days, with the interruption of therapy on 2 days because of the lack of penicillin. Seven blood cultures were positive up to the eighth day of penicillin therapy; thereafter 12 cultures were negative and none positive. The patient's temperature fluctuated between 98.6° F. and 100° C. during the entire period of penicillin therapy. When 1,680,000 units of penicillin had been given, the lack of further supplies forced discontinuation of its use on the 23rd day of hospitalization. At that time sulfamerazine administration was resumed for 10 days (1 gram every 6 hours), during which time the patient's temperature became normal. He was discharged on the 34th day of hospitalization.

On the tenth day small red papilliform areas were observed on both hands, one foot, the forehead and on the back. These gradually disappeared during penicillin therapy. The blood picture was within the normal range during the entire period of illness except for a moderate leukocytosis (9,900 w.b.c. per cu. mm.) at the time of the highest fever on the fifth day.

At the present time, 18 months after admission to the hospital, the patient is free from all symptoms related to this episode. Blood cultures taken during the intervening period have been uniformly negative.

SUMMARY

In this case the clinical and laboratory findings indicate a *Staphylococcus aureus* endocarditis, possibly based upon an old rheumatic lesion, which failed to respond to sulfamerazine treatment. Prolonged penicillin therapy (1,680,000 Oxford Units were given over a period of 14 days) followed by sulfamerazine for 10 days, resulted

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in the disappearance of organisms from the blood stream and has apparently brought about permanent recovery.

BLOOD TRANSFUSIONS AT THE SAN FRANCISCO HOSPITAL*

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THE blood bank at the San Francisco Hospital began functioning in December, 1939. From that date to July 31, 1945, a total of 12,347 transfusions have been given, about 10 per cent using plasma, 90 per cent whole blood.

Case histories in which definite reactions were experienced have been reviewed only for a three-year period, (July, 1941-June, 1944). There has been no attempt to classify the diagnoses in which transfusions were indicated, infections, injuries, operative procedures and the like. Interest, rather, has been directed to the cases showing a reaction and the type of such reactions.

For the three-year period, 250 cases were found with reactions, a little less than 4 per cent of the total transfusions recorded in that time, 6812. The number of transfusions and reactions is shown by months for each fiscal year in Table 1.

As indicated in Table 2, chills and fever either singly or together were the reactions found in 151 or 60 per cent of the cases. Allergic reactions, urticaria, itching, hives, were found in 57 cases or about 23 per cent of them, while 19 or 7½ per cent showed jaundice.

In reference to jaundice as a reaction, it should be mentioned here that transfusions have been suggested as a probable cause for the appearance, after a comparatively lengthy interval, of symptoms resembling catarrhal jaundice.[1] Two such cases were noted in the records studied.

TABLE 1.—*Transfusions and Reactions—Blood Bank of San Francisco Hospital*

Months	1941-1942 Trans-fusions	1941-1942 Reac-tions	1942-1943 Trans-fusions	1942-1943 Reac-tions	1943-1944 Trans-fusions	1943-1944 Reac-tions
July	190	11	183	7	185	5
Aug.	174	8	235	3	195	11
Sept.	168	10	205	3	206	13
Oct.	204	7	231	7	223	11
Nov.	149	8	138	8	147	6
Dec.	191	14	214	7	133	4
Jan.	157	3	273	10	165	5
Feb.	182	7	174	7	163	5
March	192	6	233	8	191	5
April	200	2	258	9	129	6
May	140	2	277	12	190	3
June	143	9	217	7	157	1
Totals	2090	87	2638	88	2084	75
Per cent reaction		4.2%		3.3%		3.6%

TABLE 2.—*Type of Reaction*

Type	1941 1942	1942 1943	1943 1944	Total	Per cent of total
Chills	14	22	11	47	18.8%
Fever	9	16	12	37	14.8%
Chills and Fever	28	25	14	67	26.8%
Allergic	23	14	20	57	22.8%
Jaundice	6	3	10	19	7.6%
Hematuria	2	1	..	3	1.2%
Hemoglobinuria	..	1	1	2	0.8%
Hemolytic	..	1	..	1	0.4%
Questionable	5	5	7	17	6.8%
Total	87	88	75	250	.....

* From the Office of the Director, Department of Public Health, City and County of San Francisco.

CASE 1.—Lung abscess-multiple transfusions of whole blood, from December, 1943 to February, 1944, with no significant reaction. Readmitted to hospital May 3, 1944 with catarrhal jaundice.

CASE 2.—Injury-transfusion May 4, 1945, one unit each pooled plasma and whole blood. Ten weeks later, diagnosis jaundice. (Complete detail on this case not yet available.)

That blood transfusions do sometimes result fatally may be an established fact and it is possible that confirmation can be found in the blood bank records or autopsy findings; but statistically, where the only source of information is a briefed statement on a death certificate, assignment of a cause of death to this source is practically an impossibility. From records at the San Francisco Hospital three cases have appeared recently in which the cause of death has been attributed directly to blood transfusion. One of these has been discussed at some length by Captain Edmond C. Alberton, M.C., A.U.S.[2] In only one of these cases has the death certificate made any mention of the transfusion. In five other cases of record the evidence does not seem sufficient definitely to attribute the death to this cause, although it is a suspected cause and probably accepted as a fact in some instances. The death certificate in none of these cases makes mention of a transfusion.

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California Physicians to Promote Insurance Plan

The California Medical Association on September 7, announced plans for a Statewide campaign to promote voluntary health insurance. The purpose is to make medical and hospital care more generally available on a budget basis.

Through expansion of the California Physicians' Service, now having a membership of 190,000, the C.M.A. will attempt to meet growing demands for prepaid medical care. Other voluntary health insurance systems also will be promoted in the newspaper advertising and sales campaign, beginning early next year.

The plans were announced before the Assembly interim health care committee, at Los Angeles, and through the San Francisco C.M.A. office.

"We believe that within a period of a very few years the great majority of the people of our State, as a result of this program, will have their health needs cared for on a pre-payment basis," Dr. E. Vincent Askey, Speaker of the C.M.A. House of Delegates, announced.

The C.M.A. announced it still opposed compulsory health insurance and declared it believed the State government should encourage voluntary health insurance programs.

A statement of principles submitted to the Assembly Committee included prepaid medical care, and distribution of costs so as to guarantee the finest possible medical care and prevention of deterioration in the quality of service.

The statement stressed the necessity for voluntary rather than compulsory health insurance as best both for the patient and the doctor.

With the closing of war industries, many of which carried prepaid medical care facilities for workers and their families, sponsors of the California Physicians' Service, pioneered by the C.M.A., believe there will be an increasingly larger number of persons joining the C.P.S. system.—San Francisco *Chronicle*, September 8.